

# JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

## ENVIRONMENT, HEALTH & SAFETY – EMERGENCY RESPONSE RESPONSE TO A RELEASE OF AN INHALATION HAZARD

TASK	HAZARDS	CONTROLS
1. Select and don the appropriate PPE.		
2. Monitor atmosphere based on Task 1 using the appropriate monitoring equipment or method.		
3. Search for spill location, contaminated equipment, and furniture.		PPE should not impair vision. Ensure that enough light is provided to the spill area to see small quantities, such as splash droplets on surfaces above the spill area.
4. Apply neutralizer if appropriate or clean up as appropriate.		Conduct a pilot application in a small area of the spill.
	Contact with the HF.	Avoid contact, as part of the clean-up plan from Task 1, by systematically applying the neutralizer and collecting the resultant materials. Sprinkle the neutralizer on the spill area. Do not "work it in." Ensure that sufficient neutralizer is within reach. Avoid touching your bare skin. Use the appropriate PPE.

		Contact with unforeseen chemicals.	Avoid contact with open containers such as pans or petri dishes. Use a buddy system so both can monitor the area.
		Contact with HF and other chemicals.	Search for other locations of contaminated areas, such as under furniture and other lab equipment.
	5. Decontaminate (search for other contaminated locations).	Contact with HF and other chemicals.	Search for other locations of contaminated areas, such as under furniture and other lab equipment.
		Electrical hazards.	Disconnect or de-energize equipment prior to handling. Avoid contact with heat sources.
		Other physical hazards.	Use tongs to pick up broken glass and other small items contaminated with HF or other chemicals. Hand decontaminated items out of the spill area as they are decontaminated. Properly dispose of expendables (towels, neutralizers, etc) in a poly-bag.
	6. Check the pH of surfaces (search for other contaminated locations).	Exposure to pH.	Use tongs with the pH strips. If the hazardous material being cleaned up has a neutralizer, have that neutralizer nearby during the cleanup.
	7. Collect and bag wastes (search for other contaminated areas).	Body injury, lifting, twisting, bending.	Use proper lifting techniques.
		Sharps.	Deposit sharps in solid-lid containers, such as tin cans or polypropylene containers.
		Slip and fall.	Be sure footing is secure while moving equipment and supplies.
	8. Final cleanup.	May find un-neutralized contaminant or hazardous material.	Begin the process for the discovered locations starting with Task 4. PPE remains on. (Be aware that cartridges have saturation points and indicators.)

<b>Other Information:</b> <b>Contributors:</b> Environment, Health and Safety <b>Created:</b> June 2005 <b>JSA Library Number:</b> EHS-ER-07		Slips and falls.	Be sure footing is secure while moving equipment and supplies.
	9. Transportation of wastes.	Inadequate control.	Refer to SOP for transportation of hazardous materials.
	<b>Required Training:</b> 1. Training 1 2. Training 2 3. Training 3	<b>Required Personal Protective Equipment (PPE):</b>	
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